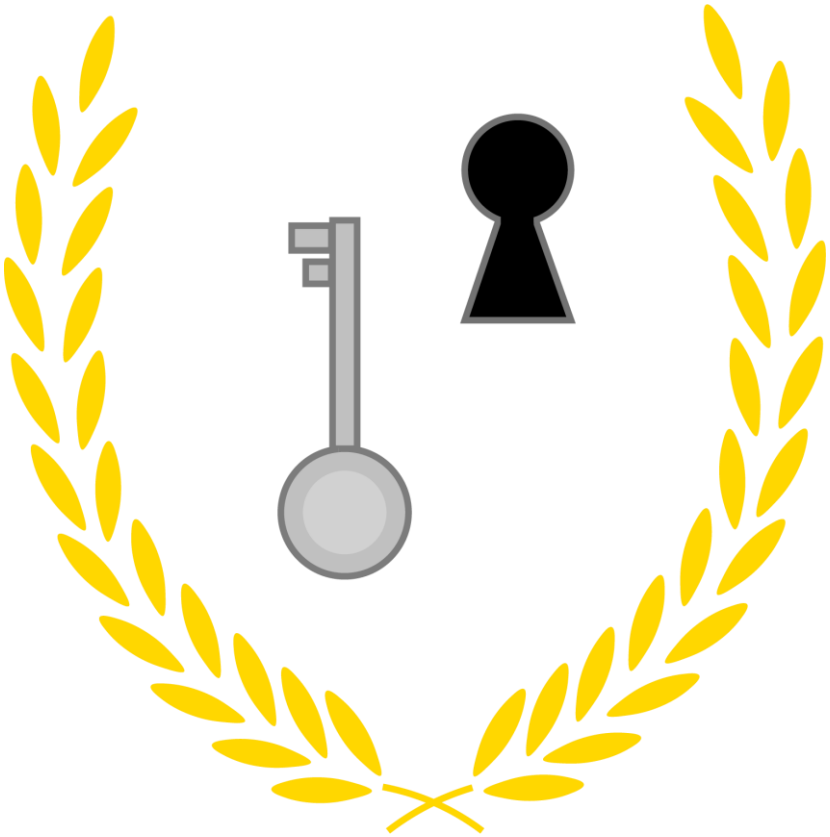

CAESAR CIPHER

User Manual

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Maquina Tonta Inc.

INDEX

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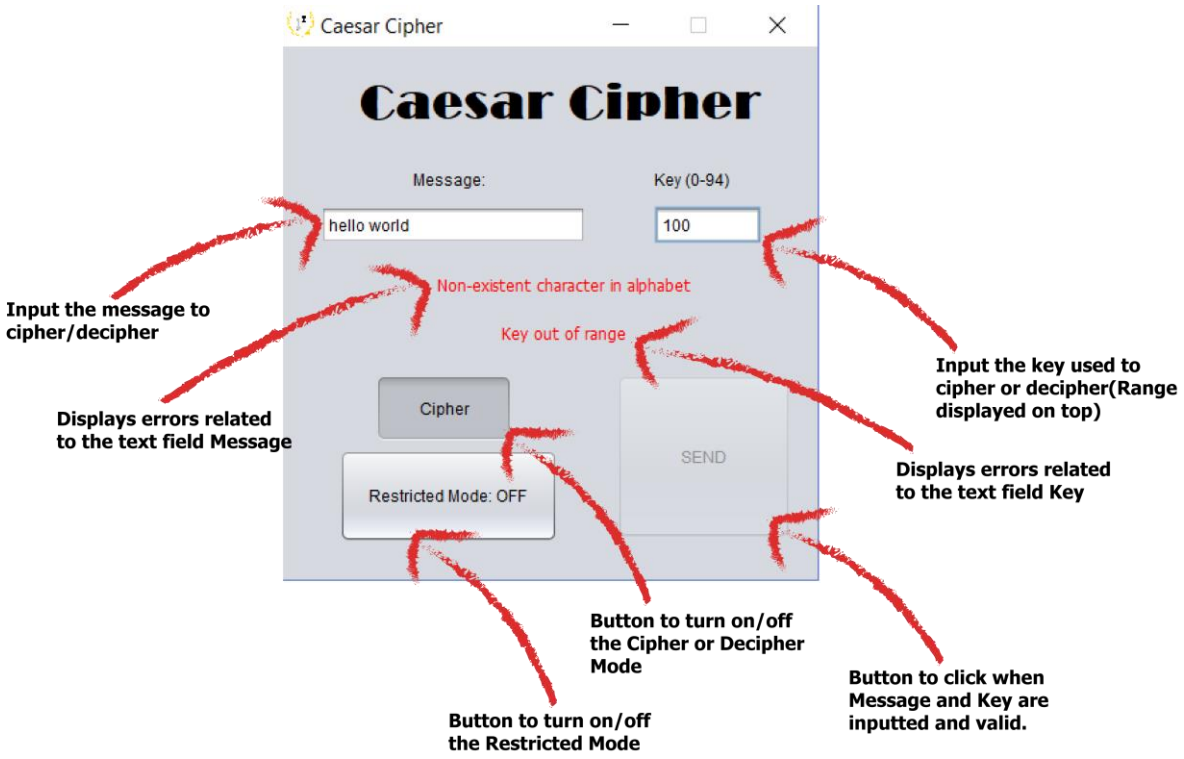
Quick Start Guide



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Previous Setup

The Caesar Cipher is a Java-based program, which means you necessarily need to have installed at least the JRE (Java Runtime Environment) on your PC. The latest versión of JRE can be downloaded in the following link. Download JRE

After downloading the file, execute it and follow the steps to install the software. Once you finished installing it, you are able to run the exe file.

What is Caesar Cipher?

The Caesar Cipher is a type of substitution cipher in which each letter in the plaintext is replaced by a letter some fixed number of

positions down the alphabet.(Wikipedia, 2017)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

For example, a letter “G” displaced three places in the alphabet gives you the following result:

X	Y	Z	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W

The cipher works simply: you choose a letter in the original alphabet and check its position, you take the letter occupying the position in the “ciphered” alphabet and, the first cipher process has been done.

Well, the number of places you displace from the origin is called Key, and with that Key, you can either cipher o decipher, depending on you. For the deciphering process you just take your alphabet and move it the number of

places back, and that’s it, you are ready to try this baby!

Alphabet and Restricted Alphabet

The program contains two types of alphabets to be used, the first one is known as the “Alphabet”, which holds almost every typeable carácter. The second one is known as “Restricted Alphabet” because it only restrains alphanumeric characters. The whole index of characters is listed below.

Alphabet	Restricted Alphabet
A	A
B	B
C	C
D	D
E	E
G	G

H	H
I	I
J	J
K	K
L	L
M	M
N	N
O	O
P	P
Q	Q
R	R
S	S
T	T
U	U
V	V
W	W
X	X
Y	Y
Z	Z
a	a
b	b
c	c
d	d
e	e
f	f

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g	g
h	h
i	i
j	j
k	k
l	l
m	m
n	n
o	o
p	p
q	q
r	r
s	s
t	t
u	u
v	v
w	w
x	x
y	y
z	z
0	0
1	1
2	2
3	3
4	4

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5	5
6	6
7	7
8	8
9	9
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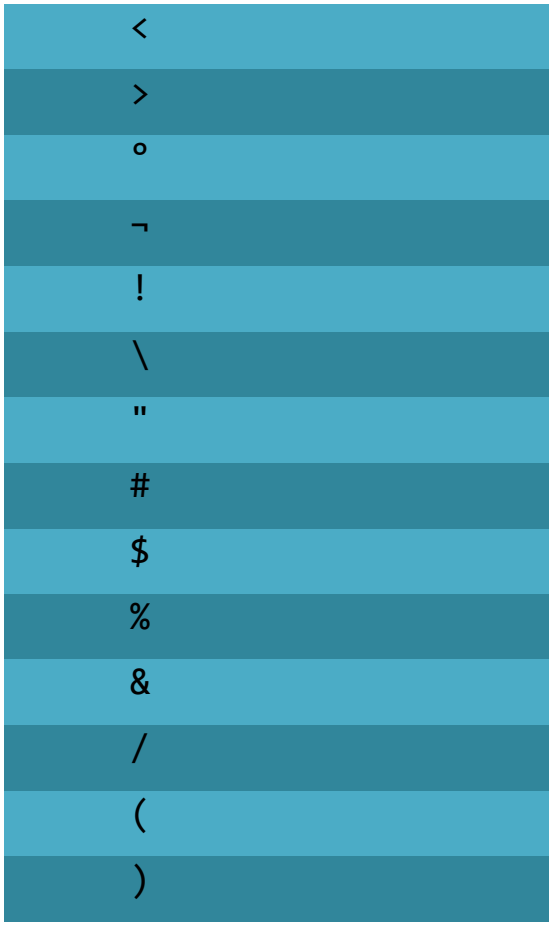
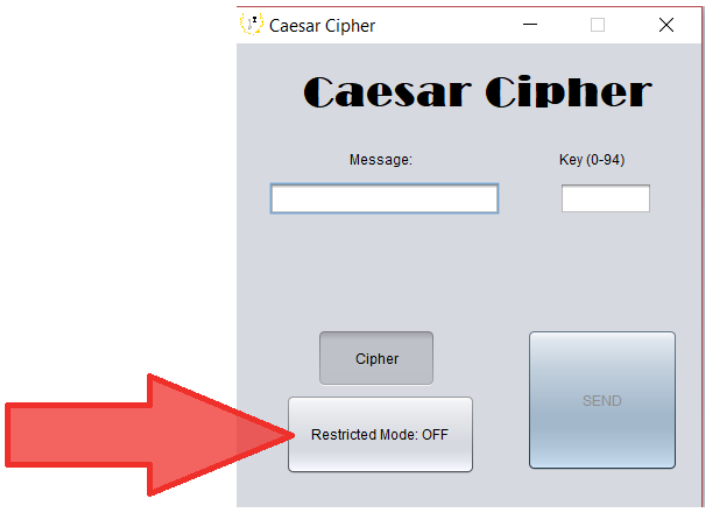


As you can see, the Restricted Alphabet is smaller than the other, so the key range decreases as well, but you don´t have to worry about it because Caesar Cipher tells you exactly which is your range and other things explained afterward.

How it works

Step 1. Select Alphabet Mode, if Restricted Mode is selected, the Restricted Alphabet is used for the process. The default value is Restricted Mode: Off.



Step 2. Input a string in the Message field.

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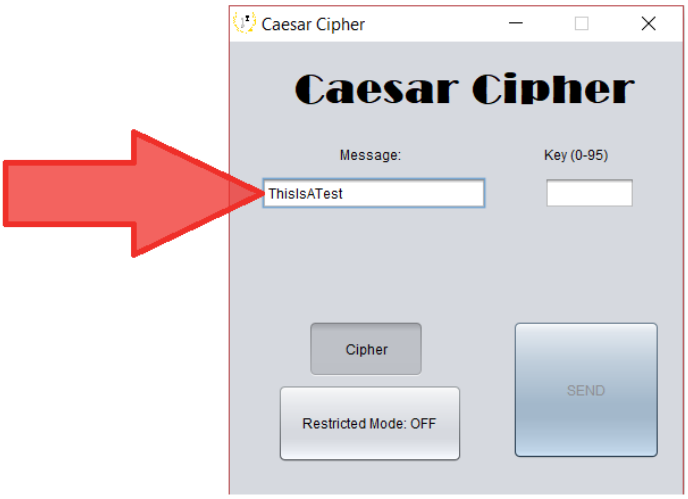
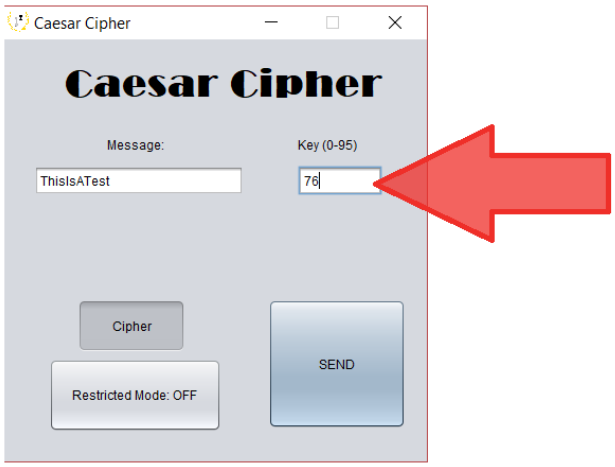
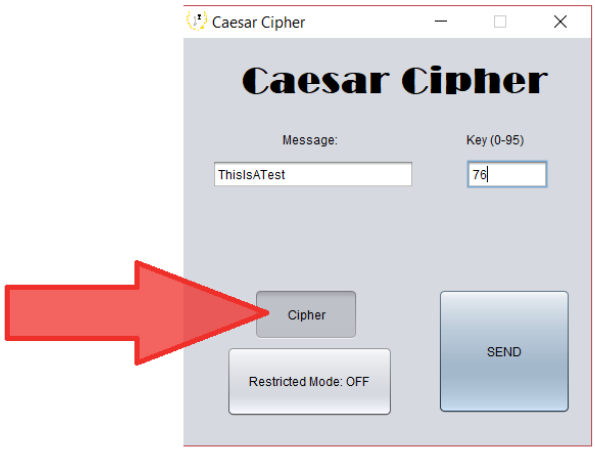


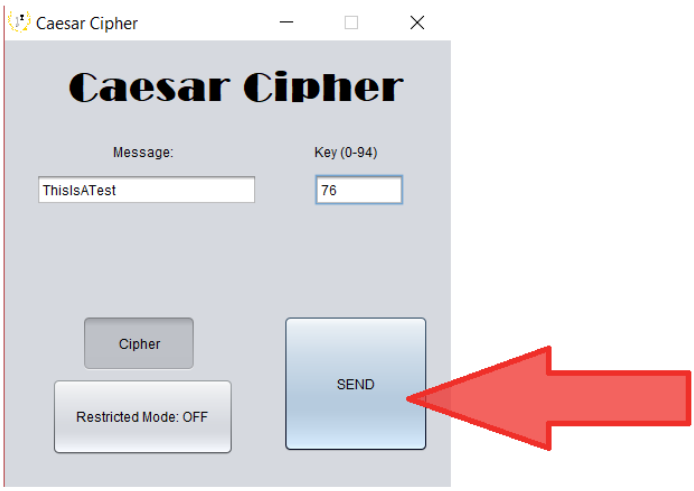
Step 3. Input a number in the Key field



Step 4. Select the Process Mode. If Cipher is selected, the program will cipher message using the key inputted, otherwise, it will decipher. The default value is Cipher.

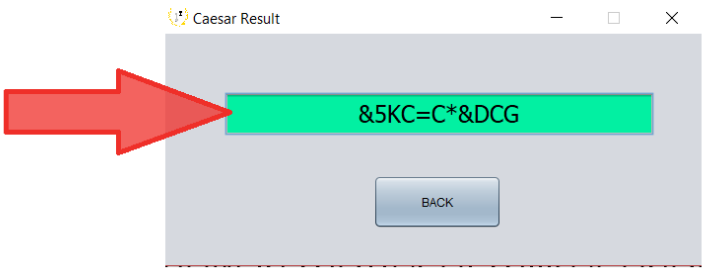


Step 5. Click SEND button to start the process.

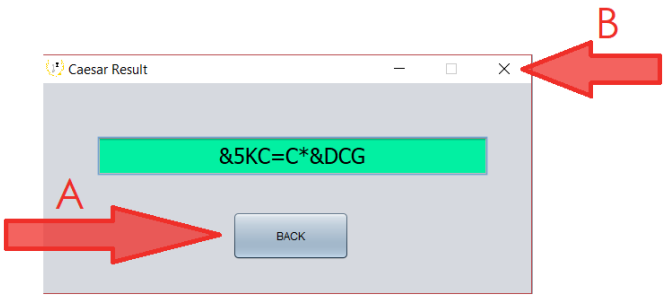


Step 6. Since it is immediate, the result will show in a matter of milliseconds. The

ciphered or deciphered message will display on the screen.



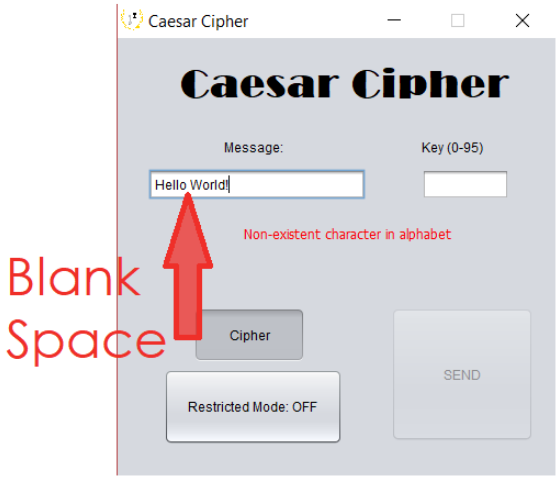
Step 7. You can go BACK(A) to repeat the whole process or you can safely close your program(B).



Limitations

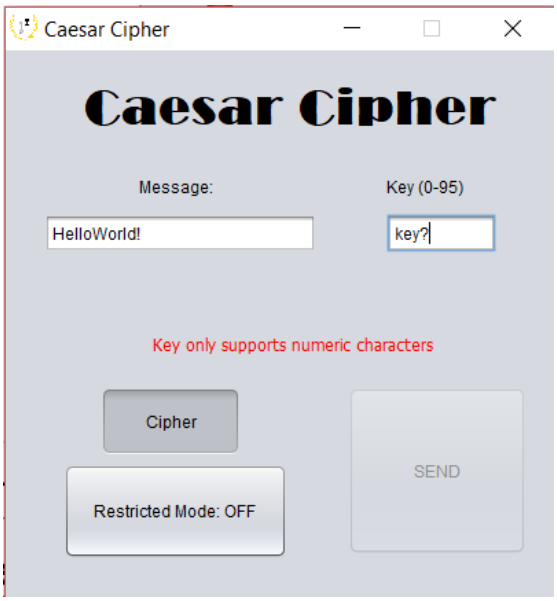
Caesar Cipher has a couple of security measures, to ensure the functionality of the program. The restrictions are the following:

1) You cannot input any character not contained in the alphabet you selected in Step 1, otherwise, it will display a warning: “Non-existent character in alphabet”

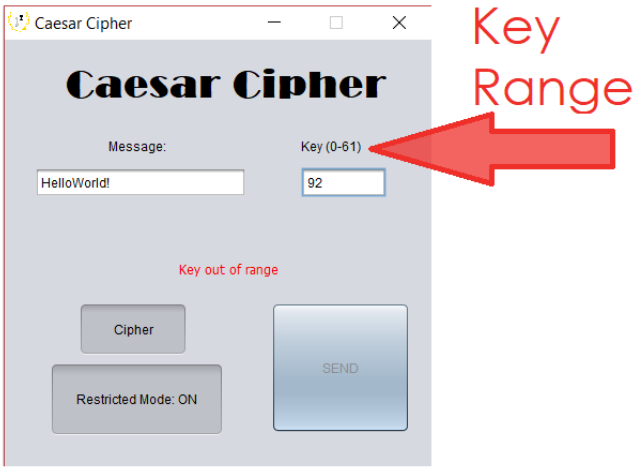


2) You cannot input other than numbers for the Key. If you try to write anything

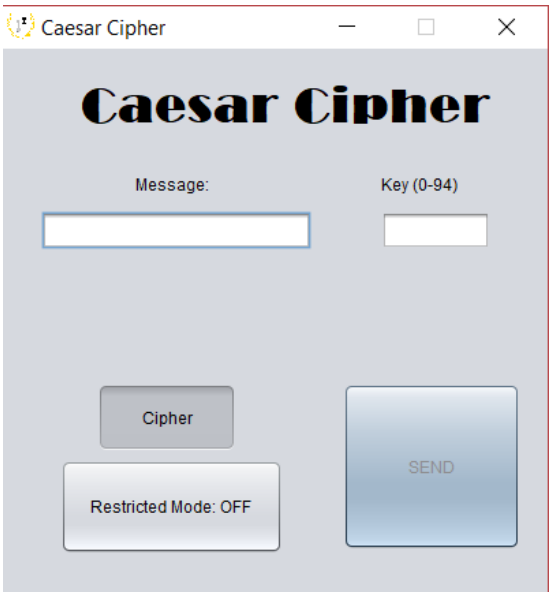
else, it will display a warning: “Key only supports numeric characters”



3) You cannot enter a Key out of the Key Range. The Key Range changes every time you click the Restricted Mode button.



4) You cannot leave any of both fields empty. It does not display any warning, but SEND button is disabled to prevent program malfunctioning.



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Wikipedia. (2017). Caesar cipher. November 11, 2017. Wikipedia Retrieved from https://en.wikipedia.org/wiki/Caesar_cipher